

ANNUAL REPORT

OFFICE OF HEALTH

1975

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Borough of Hartlepool.



ANNUAL REPORT

— OF THE —

Medical Officer of Health

for the year 1925.

WILLIAM MCKENDRICK, M.D., D.P.H.,

Medical Officer of Health.

Hartlepool :

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INDEX.

	PAGE
Births	17
Causes of Sickness in the town	12
Comparison of Statistics of Hartlepool, Durham County and all England...	16
Causes of Infant Mortality	21
Clinics, &c.	25
Deaths	19
Disinfection of Premises, etc.	33
Detailed Causes of Death... ..	15
Dried Milk	45
Extracts from Vital Statistics	9
Food and Drugs... ..	38
Hospitals	26
Health Staff	27
Housing	34
Health Visitors' Report	45
Infectious Diseases	10
Infantile Mortality	20
Laboratory Report	28
Local Acts, etc.... ..	28
Milk, etc.	39
Maternity and Child Welfare Centre... ..	25
Notification of Births	18
Population	17
Preface	5
Respiratory Diseases	24
Statistical Memoranda	8
Special Reports:	
(a) Small-pox	47
(b) On the Disposal of Fish Refuse	48
Tuberculosis	23
Water Supply	29
Work of Sanitary Inspector	31



BOROUGH OF HARTLEPOOL.

Medical Officer's Report,

FOR 1925.

"DALSCOTE,"

YORK ROAD,
COLWYN BAY,

1st June, 1926.

*To the Chairman and Members of the Health Committee
of the Borough of Hartlepool.*

GENTLEMEN,

I have the honour to present to you the Annual Report on the health of the inhabitants of the Borough of Hartlepool, during the year ended 31st December, 1925. This is the third report presented by me, and is my "swan song," as with its presentation my official connection with the Borough ceases.

The report which closely follows the scheme drafted by the Ministry of Health, is the first of what are intended to be quinquennial health surveys. With no previous report on which to model, and with very inadequate information in the earlier reports, this compilation is in many parts defective. The defect is not lessened by the fact that it is being written over 200 miles away from the health

records. However sufficient information is available to show the general trend of health progress. There can be no doubt that progress has been made.

The period began with the beginning of the post war slump in trade, and as time passed conditions became steadily worse. This economic stringency rendered it difficult for the Council to embark on expensive schemes, yet it cannot be said that Hartlepool has remained where it was. I would like to mention a few of the moves made during the period :—First and foremost comes the erection of a clinic of which the town may well be proud : then there is the creation of recreation grounds on the town moor : the building of the bathing pool : the building of the North and South promenades, which will do much to promote a cleaner town : the appointment of an additional health visitor : the establishment of a dental clinic in the town : the doubling of the ophthalmic clinic : the clearing away of slum property to some extent. All these schemes cost money but will amply repay the citizens by securing for them better health.

That the public have appreciated these improvements is easily proved. The clinic as will be shown time after time in these pages has achieved an importance in the daily life of the town that makes one wonder how the people lived without it so long.

The recreation grounds are all extensively used.

Turning to the statistics one finds much to cheer and much to disturb. Evidence of overcrowding continues to come forward in the tuberculosis and acute respiratory disease death rates, as well as in the infant mortality rate. As the report will show, much has been done to reduce these rates, but overcrowding renders the fight very unequal. It is cheering to note that small-pox has so far been denied an entry into the town. It is also pleasing to record that diphtheria and enteric fever are almost negligible factors amongst the causes of sickness and death. The latter fact probably results from the energetic policy pursued by the Council during the earlier years of the quinquennium, when all the dry closets and privies were replaced by modern water-closets.

One cannot commend the Council however on the progress of their housing schemes. 37 houses in three years is not what should have been.

A feature of recent years has been the publicity work of the Health Department. Many lectures have been given on Health Subjects, and many different kinds of meetings—men, women and children in sections and combined. I cannot but remark on the interest taken at these meetings, and I would urge the Council to continue this policy either through the medium of the Care Committee or direct through their own effort. Health week was a success last year and gave a good opportunity for concentration—but a continued pressure is required.

I would commend all the members of my staff on their splendid team work during my tenure of office. Each has worked for the common good and worked hard. Any suggestion from me was promptly carried into effect. Hartlepool is fortunate in its nurses and its Sanitary Inspector, and the Health Department is fortunate in having Miss Habron, who, although appointed as clerk to the School Medical Service, has become a sort of factotum for the entire Health Department.

In conclusion, I have to thank Councillor R. H. Davison, the Chairman of the Health Committee, for his unfailing support and encouragement, and all the Members of the Health Committee for their consideration and kindness during my term of office.

I am,

Yours sincerely,

WILLIAM McKENDRICK.

VITAL STATISTICS.

Area of Borough	...	...	924 acres
Census Population, 1921	...	...	20,997
Estimated Population, 1925 (Registrar General)	...	...	21,940
Number of Births	...	...	574
Birth-rate per 1000 inhabitants	...	...	25.9
Number of Deaths	...	...	331
Death-rate per 1000 inhabitants	...	...	15.0
Number of Deaths under 1 year of age	...	...	67
Infantile Mortality (per 1000 births)	...	...	116.7
Number of Deaths under 1 month	...	...	16
Neo-natal Rate per 1000 births	...	...	27.9
Smallpox Death rate per 1000 population	...	...	0.00
Scarlet Fever	„	„	0.04
Diphtheria	„	„	0.08
Enteric Fever	„	„	0.00
Measles	„	„	0.24
Whooping Cough	„	„	0.08
Diarrhœa (under 2 years) per 1000 births	...	...	12.1
Influenza per 1000 population	...	...	0.24
Acute Respiratory Diseases death rate	...	...	3.9
Tuberculosis—			
Pulmonary	...	...	0.91
Non-Pulmonary	...	...	0.27
Violence	...	...	0.56

MEDICAL OFFICER'S REPORT for 1925.

1. GENERAL STATISTICS.

1. Area in Acres	...	...	...	924
2. Population—				
(a) Census, 1921	...	...	...	20,997
(b) Registrar General's estimate for 1925	...			21,940
3. Number of Inhabited Houses, 1921	...			3,879
4. Number of families or separate occupiers, 1921	...			4,498
5. Rateable Value	...	...	...	£88,319
6. Sum represented by a penny rate—				
(a) Borough Fund (gross)	...			£366 9 0
(b) General District Fund (gross)				£338 9 8

2. EXTRACTS FROM VITAL STATISTICS.

1. Births—						
		Male		Female	Total	
(a) Legitimate	...	291	...	268	...	559
(b) Illegitimate	...	5	...	10	...	15
(c) Total	...	296	...	278	...	574

∴ Birth Rate = 25.9 per 1000 population.

2. Deaths—						
		Male		Female	Total	
		173	...	158	...	331

3. Women dying in consequence of child birth—				
(a) Sepsis	...	...	..	2
(b) From other causes		...	...	2

4. Deaths of Infants under 1 year of age—						
			Male		Female	Total
(a) Legitimate	...	28	...	33	...	61
(b) Illegitimate	...	4	...	2	...	6
(c) Total	...	32	...	35	...	67

∴ Infantile Mortality Rate per 1000 Births was—

(a) Legitimate	=	109.1
(b) Illegitimate	=	400.0
(c) Total	=	116.7

5. Deaths from—

(a) Measles, all ages ...	...	...	6
(b) Whooping Cough, all ages	...	...	2
(c) Diarrhœa, under 2 years	...	..	7

ANALYSIS OF INFECTIOUS DISEASE.

Cases and Deaths.

Disease	Cases Notified													Removed to Hospital	Deaths												
	Total	0-1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	over 65		Total	0-1	1-2	2-3	3-4	4-5	5-10	10-15	15-20	20-35	35-45	45-65	over 65
Diphtheria	3	...	...	...	...	...	3	...	...	...	...	...	...	1	2	...	...	...	...	...	2	...	...	...	...	...	...
Scarlet Fever	57	...	2	2	7	8	25	10	3	...	...	...	...	30	1	...	...	...	...	1	...	...	...	...	...	...	...
Enteric Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Small-pox	2*	...	...	...	...	...	...	...	...	2	...	...	...	2*	...	...	...	...	...	...	...	...	...	...	...	...	...
PuerperalFev.	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthal. Neon	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enceph. Leth.	4	...	...	...	...	...	1	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	8	1	...	...	...	...	1	2	...	1	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poliomyelitis	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	76	2	3	2	7	8	30	12	5	3	2	1	1	...	3	...	...	...	...	1	2	...	...	...	...	...	...

* 1 true case

TUBERCULOSIS.

AGE PERIOD	NEW CASES NOTIFIED				DEATHS			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	M	F	M	F	M	F	M	F
0— 1 ...	0	0	1	0	0	0	0	0
1— 4 ...	1	0	2	4	0	0	0	1
5— 9 ...	0	0	4	3	0	0	0	1
10—14 ...	0	1	3	6	0	2	0	0
15—19 ...	2	1	2	0	1	1	0	0
20—24 ...	3	6	0	1	0	0	0	1
25—34 ...	2	5	2	0	1	1	1	1
35—44 ...	3	1	0	0	2	2	0	0
45—54 ...	2	2	0	0	3	1	0	0
55—64 ...	0	0	0	0	0	0	0	0
Over 65 ...	0	0	0	0	0	0	0	0
Total ...	13	16	14	14	7	7	1	4

SOCIAL CONDITIONS.

Hartlepool is in a favoured position on a peninsula jutting out into the North Sea. To this position the town owes its origin and its interests. Originally a largely residential town with a very important harbour, it has gradually developed into a purely industrial town with large shipbuilding yards, large docks, and a large fishing fleet. Unfortunately this industrial development has been rapid, and houses substantially built for wealthy shipowners have had to be adapted for working class families, while the working class houses have been grossly overtaxed, and now the housing conditions are such as mar the social life of the inhabitants. No doubt the social conditions would have been much better had not the great shipping slump temporarily blighted the prosperity of the town. The shipbuilding yards have for the past three or four years been more or less empty, while the docks have been very spasmodically filled. The fishing industry too has fallen on evil times.

More recently however the inhabitants have come to appreciate the position of the town and its potentialities as a health resort. Its varied coast, its extensive promenades, its proximity to the large industrial centres mark it out for this purpose, and the Council has during the last five years spent large sums of money on beautifying the town and on providing recreations.

POOR LAW RELIEF.

I am indebted to MR. LAWSON, the local Relieving Officer, for the following statement :—

*Amount of Poor Law Relief (Outdoor) Five years ending
March 31st, 1926.*

Year ending March 31st, 1922	...	...	£12,367	4	8
„ „ 1923	...	...	£20,259	10	9
„ „ 1924	...	...	£16,419	18	4
„ „ 1925	...	...	£9,632	14	10
„ „ 1926	...	...	£12,414	9	1

FOR MEDICAL ATTENDANCE--

608 Tickets issued during 12 months ending March 31st, 1926.

USE OF HOWBECK INFIRMARY—

1. As Sanatorium in Lung cases.
2. Increasing use in Operation cases.
3. Chiefly used in Chronic cases and cases not able to have Nursing attention at home.

HOSPITAL AND OTHER GRATUITOUS MEDICAL RELIEF.

During the past few years when much suffering and illness has occurred amongst the poorer classes, the Hartlepoons Hospital has played a noble part—the Hospital has gradually extended first by utilizing all possible rooms in the old building and ultimately by erecting a large new building.

The School Clinic has played a large part in the gratuitous treatment of school children—it also has required the erection of new premises, and during the Winter months, at least over 100 children are treated there daily.

CAUSES OF SICKNESS AND INVALIDITY.

While it would be difficult to give any accurate statement of the causes of sickness amongst the population at large, it may be taken that the main conditions causing invalidity are chest diseases, tuberculosis and cancer, while among the epidemic diseases influenza, measles and whooping cough have paid almost annual visits to the town. We have reason to rejoice that so far small-pox has only made one effort to gain a footing in the town—two cases were notified in 1925 but one of these proved to be another condition and

the notification was withdrawn.

The following table will show the incidence of notifiable Infectious Diseases during the period under review.

	1920	1921	1922	1923	1924	1925
Diphtheria ...	5	7	5	6	4	3
Scarlet Fever ...	113	69	10	31	46	57
Enteric Fever ...	...	4	2	2	2	...
Small-pox ...	...	...	...	...	...	1
Puerperal Fever ...	...	...	...	...	...	1
Ophthalmia Neon. ...	8	7	6	1	5	1
Enceph. Lethargica ...	...	...	...	1	2	4
Erysipelas ...	4	6	10	6	9	8
Tuberculosis—						
Pulmonary ...	33	24	27	28	27	29
Non-pulmonary ...	14	15	14	28	32	28
Total ...	47	39	41	56	59	57
	177	129	74	114	127	133

From this it will be seen that there has been a definite cycle in the incidence of disease—beginning with a large total in 1920—and this is the summit of a peak which began in 1917—the numbers fell to 74 in 1922 and since then have gradually risen. On examining the table more particularly however it will be seen that the swing is largely due to scarlet fever, the incidence of which swung from 113 in 1920 to 10 in 1922 and back to 57 in 1925.

It is pleasing to record the low incidence of diphtheria, enteric fever and puerperal fever—very few cases of these have occurred. It is also pleasing to record that small-pox has only been able to make one entry into the town—and then only claimed one victim.

On the other hand the tuberculosis figures are disquieting. This disease is increasing its hold on the citizens. Pulmonary tuberculosis does not vary very much, but non-pulmonary tuberculosis is definitely increased—the average for the first three years of the table is less than half that of the latter three years. This increase is the more serious in that non-pulmonary tuberculosis is largely a children's disease. The position is, to my mind, the result of overcrowded housing conditions, and is one of the prices to be paid for economy in the housing schemes. Whether lower "rates" or a lower tuberculosis rate is desirable is for the Council to decide.

The following table shows the deaths due to infectious disease during the period :—

	1920	1921	1922	1923	1924	1925
Diphtheria	1	1	1	1	0	2
Scarlet Fever... ..	2	3	0	1	2	1
Enteric Fever	0	0	0	1	1	0
Puerperal Fever	0	0	0	0	1	0
Erysipelas	0	1	2	0	0	0
Pneumonia... ..	?	39	23	41	43	52
Epidemic Diarrhœa	7	6	2	8	4	7
Measles	6	0	0	7	4	6
Whooping Cough	0	2	4	2	1	2
Influenza	16	10	10	3	15	6
Tuberculosis :						
Pulmonary	17	25	18	22	19	20
Non-Pulmonary... ..	8	5	8	13	11	6
Total	25	30	26	35	30	26
Total		93	78	93	101	102

From this it will be seen that the ordinary notifiable diseases have not been serious in nature. One death per annum from Diphtheria is just enough to remind us that it must still be watched, most of these deaths were due to parents not suspecting the condition till too late. Severe cases of Scarlet Fever continue to crop up unexpectedly, but as a whole a mild type has prevailed.

Pneumonia is a disease of overcrowding and its record is very similar to Tuberculosis. There is an alarmingly steady increase in its incidence.

The infantile conditions are all fatal because of neglect and squalor, and do not show much change during the quinquennial period. With the appointment of a third Health Visitor and the organisation of a Voluntary Children's Care Committee, it is hoped to combat these diseases more effectively.

Influenza has visited Hartlepool in the course of its peregrinations over the world and has had a serious effect on the comfort of the inhabitants, although it has not been so dangerous to life as in other areas.

A detailed statement of the causes of deaths from all conditions during the three years in which I was in office is appended. From this it will be seen that during the last two years 10% of deaths have been due to cancer, and 12% of deaths due to heart disease. It is noteworthy that there is very little rheumatism—indeed, this constitutes one of the main claims of Hartlepool to being a Health Resort. It is a suitable residence for persons suffering from chronic rheumatism.

DETAILED STATEMENT OF CAUSES OF DEATH
IN THE BOROUGH.

Cause of Death.		1923	1924	1925
ALL CAUSES	...	326	366	331
1 Enteric Fever	...	2	1	...
2 Small-pox	...	...	...	...
3 Measles	...	7	4	6
4 Scarlet Fever	...	1	2	1
5 Whooping Cough	...	2	1	2
6 Diphtheria	...	1	...	2
7 Influenza	...	3	15	6
8 Encephalitis Lethargica	...	...	...	1
9 Meningococcal Meningitis	...	...	...	...
10 Tuberculosis of Respiratory System	...	22	19	20
11 Other Tuberculous Diseases	...	13	11	6
12 Cancer, Malignant Disease	...	19	30	30
13 Rheumatic Fever	...	3	1	4
14 Diabetes	...	4	4	2
15 Cerebral Hæmorrhage	...	25	17	9
16 Heart Disease	...	19	40	44
17 Arterio-sclerosis	...	3	6	5
18 Bronchitis	...	42	45	32
19 Pneumonia	...	41	43	52
20 Other Respiratory Diseases	...	3	6	3
21 Ulcer of Stomach, etc.	...	2	...	...
22 Diarrhœa, etc. (under 2 years)	...	8	4	7
23 Appendicitis	...	3	2	2
24 Cirrhosis of Liver	...	...	...	...
25 Acute and Chronic Nephritis	...	10	4	10
26 Puerperal Sepsis	...	...	1	2
27 Other Accidents and Diseases of Pregnancy & Parturition	...	2	2	2
28 Congenital Debility and mal- formation, premature birth	...	17	24	15
29 Suicide	...	1	1	2
30 Other deaths by violence	...	11	7	12
31 Other defined diseases	...	61	76	54
32 Causes ill-defined or unknown	...	1	...	...
Deaths of Infants under 1 year—				
Total	...	62	79	67
Illegitimate	...	8	3	6

BIRTH-RATE, DEATH-RATE, AND ANALYSIS OF MORTALITY DURING THE YEAR 1925.

(Provisional figures. The rates for England and Wales have been calculated on a population estimated to the middle of 1925, while those for the towns have been calculated on populations estimated to the middle of 1924. The mortality rates refer to the whole population as regards England and Wales, but only to civilians as regards London and the groups of towns).

	BIRTH-RATE PER 1000 TOTAL POPULATION	ANNUAL DEATH-RATE PER 1,000 POPULATION										RATE PER 1,000 BIRTHS		PERCENTAGE OF TOTAL DEATHS	
		All Causes	Enteric Fever	Small-pox	Measles	Scarlet Fever	Whooping Cough	Diphtheria	Influenza	Violence	Diarrhoea and Enteritis (under Two years)	Total Deaths under One year	Causes of Death certi- fied by Registered Medical Practitioners	Inquest Cases	Uncertified Causes of Death
England and Wales	18.3	12.2	0.01	0.00	0.13	0.03	0.15	0.07	0.32	0.47	8.4	75	92.1	6.9	1.0
105 County Boroughs and Great Towns, including London	18.8	12.2	0.01	0.00	0.17	0.03	0.18	0.09	0.30	0.43	10.8	79	92.1	7.3	0.6
157 Smaller Towns (1921 Adjusted Populations 20,000-50,000)	18.3	11.2	0.01	0.00	0.15	0.02	0.14	0.06	0.31	0.38	7.6	74	93.0	5.9	1.1
London	18.0	11.7	0.01	0.00	0.08	0.02	0.19	0.11	0.23	0.46	10.6	67	91.1	8.9	0.0
Hartlepool	25.9	15.0	0.00	0.00	0.24	0.04	0.08	0.08	0.24	0.56	12.1	116			

POPULATION.

The following table gives a synopsis of the progress of the Borough in recent years :—

		1910-14	1921	1922	1923	1924	1925
Births	...	650	683	626	569	619	574
Birth Rate	...	30.1	32	29.1	26.4	28.4	25.9
Deaths	...	380	348	320	326	366	331
Death Rate	...	19.6	16.3	14.9	14.9	16.6	15.0
Deaths under 1 year		91	81	65	62	79	67
Infant Mortality Rate		140.5	118	103	108	127.6	116.7
Phthisis Death Rate		1.0	0.61	0.28	0.9	1.40	1.04
Influenza do.	...		1.10	0.83	1.00	0.60	0.24
Acute Respiratory							
Death Rate		3.0	3.9	3.6	3.8	4.3	3.9
Population	...	21,072	21,300	21,470	21,570	21,810	21,940

From the above, it will be seen that the population has steadily grown and is now approaching the 22,000 mark. This increase of population is not desirable. As pointed out in my last report, Hartlepool is a very congested area, there being about 50 persons per inhabited acre. The town cannot afford to have the scanty open spaces encroached upon. The Town Moor has already lost much of its grass and while there can be nothing but satisfaction with the laying down of the tennis courts, etc., nothing has been put in the place of these damaged "lungs." Perhaps the increase of the transport services contemplated under the Hartlepool Corporation (1925) Act will take the people to the green fields since the green fields have ceased to exist near their homes.

BIRTHS.

One is glad once more to record a decrease in the Birth-rate which in 1925 fell to 25.9 per 1000 population. As will be seen from the table giving comparisons between Hartlepool, and England and Wales, the Borough figure is still 8 points above that of the nation.

The table immediately above shows that there were 109 fewer births in 1925 than in 1921, although still 5 in excess of the 1923 figure.

The following are the numbers of illegitimate children born in the period :—

1921	...	...	26
1922	...	...	20
1923	...	...	22
1924	...	...	23
1925	...	...	15

The 1925 figure is the lowest on record.

There were 10 still-births in the town as against 19 in 1924. Whether this is a reflex of the antenatal work now carried on at the New Clinic or merely a coincidence will be revealed by future events.

NOTIFICATION OF BIRTHS ACTS.

The following shows the manner in which notification of births was carried out in the town in 1925.

Births notified by Doctors	...	476
„ „ Midwives	...	84
„ „ Registrar	...	14
		<hr/>
		574
Transferred Births	...	7
		<hr/>
		581
		<hr/>

Thus it will be seen that only 2.4% of births escaped notification. The only objection one has to the manner of notification is a tendency for the notifications to be delayed beyond the statutory 36 hours. It may be pointed out that whereas in practice the medical attendant or midwife notifies the birth, the statutory duty to do so rests on the parent. No notifications have been made by the parent during the quinquennial period.

A notable feature of the above table is the very large proportion of births notified by medical practitioners. Whereas in the country at large over 50% of confinements are conducted by midwives, in Hartlepool only 14.7% of confinements are so conducted. The value of the midwife is not properly appreciated locally. She is a nurse who, after a prolonged general training specializes in midwifery and her midwifery training is even more intensive than that of a doctor. No doubt she is unable to deal with abnormal conditions but she is trained to recognise the earliest variations from the normal and she must in such cases send immediately for an expert—the cost of the expert medical treatment being paid not by the patient, but by the County Council. There are so few really abnormal cases that it is

very occasional for a midwife to send for help. It is found that the results obtained by trained midwives are every bit as satisfactory as those of doctors. Therefore it is to be hoped that the women of Hartlepool will have more confidence in these midwives.

DEATHS.

The death-rate has fallen from the high rate of 16.6 in 1924 to 15.0 in 1925. This is still much above the national figure. It should be noted however that there is a very considerable variance between figures obtained locally and those sent us by the Registrar General. Locally we can only trace 282 deaths, whereas the Registrar General allocates to us 331 deaths—a difference of 49 (or over 15% more than we agree.) The local figures give a death-rate of 12.8 which is the lowest recorded.

For obvious reasons, it is only possible to give an analysis of the sexes and ages of those deaths known locally. They are as follows :—

	Males		Females		Total
Under 1 year ...	29	...	33	...	62
1— 5 years ...	22	...	19	...	41
5—65 years ...	69	...	50	...	119
Over 65 years ...	24	...	36	...	60
Total ...	144	...	138	...	282

The percentages are as follows :—

	Males		Females		Total
Under 1 year ...	10.3	...	11.7	...	22.0
1— 5 years ...	7.8	...	6.7	...	14.5
5—65 years ...	24.5	...	17.7	...	42.2
Over 65 years ...	8.5	...	12.8	...	21.3
Total ...	51.1	...	48.9	...	100.0

When it is remembered that according to the 1921 census there was a large excess of males over females in the Borough, and that the male birth rate is higher than the female, the above figures will be of considerable satisfaction to the male population.

From these tables it will be seen that 22% of the total deaths were infants and 36.5% were children under school age. This is a very heavy toll.

INFANT MORTALITY.

The Infant Mortality Rate during 1925 was disappointing. Assuming the Registrar-General's figures to be correct (and they are $8\frac{1}{2}\%$ higher than we can account for locally). The rate for the year was 116.7 per 1000 as against 75 for the nation as a whole.

The quinquennium has been a chequered one for the infants. In all 354 infant deaths occurred amongst 3071 births, or an average mortality rate of 114 per 1000. The worst year was 1924 when the rate was 127.6, and the best was 1922 when the figure was 102. Locally we are aware of 62 infant deaths in 1925—this gives an infant mortality of 106 per 1000 births. These 62 deaths were caused as follows:—

1. Acute Bronchitis and Convulsions	15
2. Bronchopneumonia	13
3. Prematurity	6
4. Congenital Debility	3
5. Erysipelas	1
6. Infantile Convulsions	2
7. Marasmus	4
8. Gastro-enteritis	5
9. Gastritis	4
10. Measles and Acute Bronchitis ...	3
11. Whooping Cough	1
12. Congenital Heart Disease	2
13. Other conditions	3

62

The following table gives a comparison of the causes of infant deaths during the quinquennium—in groups:—

	1921	1922	1923	1924	1925
Premature, etc.	23	28	16	32	15
Bronchitis and Pneumonia	29	19	29	36	28
Gastritis and Enteritis	5	8	8	3	9
Measles	0	0	1	1	3
Convulsions	14	3	3	6	2
Other	1	3	5	4	5
	<hr/> 72	<hr/> 61	<hr/> 62	<hr/> 82	<hr/> 62

It will be seen there were fewer deaths from prematurity in 1925 than in any previous year. In this connection it is noteworthy that in 1925 there were 93 visits paid by the Health Visitors to expectant mothers as against 42 in 1924 and 59 in 1923. It may also be noted that a special clinic was held on Monday afternoons to

which expectant mothers were specially invited and to which a very considerable number came. I have no doubt that this cause of death has been permanently reduced.

Bronchitis and pneumonia has once more taken a heavy toll: a great effort was made during the Spring months to combat this disease and as a result the mortality figures for the first quarter of the year were very good: but a severe April and Winter counter-balanced this. It is pleasing to note that the promise of 1926 is very good. The infant mortality figures for the first quarter of the year 1926 with the corresponding figures for 1924 and 1925 are as follows:

		1924	1925	1926
No. of Deaths	...	30	19	14
Infantile Mortality Rate		160	131	102

Gastric troubles and infectious disease were rather more prevalent in 1925 than at any other period in the quinquennium.

The year has been noteworthy for several advances in the Maternity and Child Welfare Work—advances which will in the immediate future lead to a lowering of the mortality rate.

The Children's Care Committee has grown in strength and influence. It is now an active propagandist institution. Under its auspices Health Week was organized and successfully carried through. A beginning was made to a scheme of holding educational meetings—the first of the series was held in November when Dr. Brodie of Durham C.C. addressed an afternoon meeting. There would be over 300 mothers present. The Care Committee also promoted a competition for prizes presented by the Mayoress (Mrs. W. O. Atkinson) amongst the senior girls of Galley's Field School. A series of talks were given by the M.O.H., and demonstrations in washing baby, etc., were given by Nurse Forbes at the Clinic.

The Committee also through the kindness of the Mayoress obtained a number of maternity bags for the use of necessitous mothers. These are much in demand.

Health week was an unqualified success. Beginning with the Church services, when most of the clergymen enthusiastically joined in the Health Crusade, the intensive health campaign was carried out by:—

- (i) The distribution of health literature from door to door by the Ladies of the Care Committee.

- (ii) The exhibition of a health picture and slides at each performance in the Palladium Picture Theatre by Mr. Bennet, the Manager.
- (iii) The discussion of Health at all Guild, etc., meetings during the week.
- (iv) Health lessons in the schools.
- (v) A baby show.

The outstanding event of the week, however, was the opening of the new Clinic by Mrs. Pease of Darlington, and the public lecture following—by the County M.O.H., Dr. Hill.

The “Northern Daily Mail” very kindly reported the health talks, etc., fully.

The new Clinic has since October been very extensively used. The numbers of mothers attending grew to such an extent that a second weekly session had to be opened. The following table gives record of the work of the Clinic during the past four years. The 1923 figures are probably low because of the long period during which the town was without an M.O.H.

		1922	1923	1924	1925
No. Enrolled—					
(a)	Infants	272	191	240	277
(b)	1—5 years	88	70	128	219
(c)	Total	360	261	368	497
No. who attended more than twice—					
(a)	Infants	137	141	153	225
(b)	1—5 years	21	29	53	127
(c)	Total	158	170	206	352
Total Attendances—					
(a)	Infants	1153	851	1158	1658
(b)	1—5 years	188	204	452	797
(c)	Total	1341	1055	1610	2455
Average Attendances—					
(a)	Infants	23	17	22	33
(b)	1—5 years	4	4	7	8
(c)	Total	27	21	29	41

Thus it will be seen that there has been a steady increase in the popularity of the Child Welfare Centre; but that the numbers during 1925 have jumped enormously. 277 Infants under one year means that almost 50% of the children born in the town attend at the Centre. A very pleasing feature of the year has been the increased attendance of the "toddlers" (*i.e.* children of 1—5 years). Beginning with 21 in regular attendance in 1922 there were 127 in 1925. By "regular attendance" is meant periodical attendance for examination. In the case of the toddlers this should be every 4—8 weeks. When an infant or toddler coming to the clinic is found to suffer from any minor ailment, it has been the custom during the year to invite the parent to bring the child to the school clinic—in all 61 children were so referred during 1925 and 167 attendances were recorded. Fewer cases have been referred to Hospital during 1925 than previously. When a case needing hospital treatment is discovered at the Clinic, the parent is usually advised to go to a local practitioner; this has proved very satisfactory as prompt treatment has thereby been obtained.

An important advance was made with the appointment of a third Health Visitor during the year. Nurse Forbes took up duties on the 29th of June. Unfortunately the illness of Nurse Hayden prevented us from securing the full benefit of this appointment till the last month of the year, but the benefit will be seen in 1926.

While the child life of the town has not been very satisfactory in the past, one cannot but feel that the future outlook is brighter although home conditions and industrial conditions are heavy handicaps.

TUBERCULOSIS.

The Tuberculosis record for the five years is as under :—

	Notifications		Deaths	
1921	...	39	...	30
1922	...	42	...	26
1923	...	55	...	35
1924	...	61	...	30
1925	...	57	...	26

It will be seen that the notifications have tended to increase while the deaths have not greatly varied. This may be due to improved notification rather than increased incidence. As pointed out earlier, there has been very little variation in the notifications of pulmonary tuberculosis, but a 100% increase in the notifications of other forms of tuberculosis—which are not as a rule fatal. Consequently, the steady death-rate is no indication of the incidence of the disease.

The rates are as follows :—

Death-rate per 1000 population—

		1921	1922	1923	1924	1925
(a)	Pulmonary ...	1.17	0.83	1.01	0.87	0.91
(b)	Non-pulmonary ...	0.23	0.36	0.60	0.50	0.24
(c)	Total ...	1.40	1.19	1.61	1.37	1.15

Incidence per 1000 population—

(a)	Pulmonary ...	1.12	1.26	1.30	1.24	1.32
(b)	Non-pulmonary ...	0.70	0.65	1.30	1.46	1.27
(c)	Total ...	1.82	1.91	2.60	2.70	2.59

The Tuberculosis schemes in force in the Borough are administered by Durham County Council, which has at its disposal 367 sanatoria beds and 60 hospital beds for cases occurring in the County. These numbers are being augmented considerably. A considerable number of Hartlepool cases have been admitted to the Sanatoria.

Last year, in my report, I suggested that it might be possible to hold a Tuberculosis Dispensary in Hartlepool instead of making all cases and suspected cases tramp over to West Hartlepool. Whether this will mature or not does not yet seem clear but a very great advance has recently been made in the appointment of my successor as Assistant Tuberculosis Officer. This will do away with a dual control of the nurses and will increase the efficiency of the Medical Officer in the fight against Tuberculosis. He will now have a more intimate knowledge of the potentialities of each sufferer for spreading infection.

RESPIRATORY DISEASES (excluding Tuberculosis).

Chest diseases take a very heavy toll of lives and cause a vast amount of suffering each year in Hartlepool as will be seen from the following table :—

		Bronchitis		Pneumonia		Total
1921	...	44	...	39	...	83
1922	...	46	...	31	...	77
1923	...	42	...	41	...	83
1924	...	45	...	43	...	88
1925	...	32	...	52	...	84

From this it will be seen that the number of deaths keeps very steady, and together with the pulmonary tuberculosis causes each year over 100 deaths, or 33% of the total deaths.

OPHTHALMIA NEONATORUM.

There has been a considerable laxity in the notification of this condition in the past. In a number of cases disaster has resulted from careless treatment. Mothers and practitioners must realise that any purulent discharge from the eyes within 21 days of birth is to be regarded as Ophthalmia Neonatorum and notified, when the Health Department will see to it that treatment is efficiently carried out. There is a tendency to consider a discharge from an eye as "a cold." A number of cases have been found by the Health Visitor.

Notified	Treated		Vision Unimpaired	Vision Impaired	Total Blindness	Dead
	At Home	In Hospital				
4	4	0	4	0	0	0

Of these four notifications only one was regular, the other three being discovered by the Health Visitors, visited by the M.O.H., and entered on the register by him.

CLINIC AND TREATMENT CENTRES.

1. MATERNITY AND CHILD WELFARE. This centre is now held at the New Clinic, Frederic Street. The official time is 2—4 p.m. on Wednesdays, but the Medical Officer is also in attendance and sees mothers at 2 p.m. on Mondays.

Nature of Consultations :—

- (i) Infants welfare.
- (ii) Welfare of Children of 1—5 years.
- (iii) Welfare of Nursing Mothers.
- (iv) Welfare of Expectant Mothers.

2. SCHOOL CLINIC. This is provided by the Hartlepool Corporation Education Committee and is open on Monday, Tuesday, Wednesday and Thursday mornings, at 9 a.m. for treatment of minor ailments. It is also open for this purpose on Fridays, but only those asked to attend are treated.

The dental clinic is also held here on Tuesdays, at 9-30 a.m. and 2 p.m. but treatment is only carried out on those children notified to attend.

The ophthalmic clinic is still held in the old clinic,

Baltic St. School on Fridays, at 9-30 a.m. The School Medical Officer attends on Mondays & Thursdays at 9 a.m. to see special cases.

3. TUBERCULOSIS DISPENSARY. This is provided by the Durham County Council, and is at present held on Mondays, at 9 a.m. at Mill House, Stranton. West Hartlepool. All suspected cases of tuberculosis are examined on presentation there.
4. VENEREAL DISEASES are treated at the clinics provided for this purpose by the West Hartlepool Corporation.

HOSPITALS PROVIDED OR SUBSIDIZED BY THE LOCAL AUTHORITY.

1. TUBERCULOSIS—

- (a) Pulmonary cases are sent to the Sanatoria and Hospitals provided by the Durham County Council.
- (b) Surgical cases may go to the institutions provided by the Durham County Council or to the Hartlepool Hospital, where there is an efficient orthopædic department with light, etc., apparatus.

2. MATERNITY—

During the year cases were sent to Grantully Home (provided by the West Hartlepool Corporation). Those cases sent by the Medical Officer of Health for Hartlepool, and which were considered necessitous, went at the expense of Hartlepool Corporation. The number of cases to be admitted was limited to ten per annum.

3. CHILDREN —

Children suffering from injury or disease are admitted either to the Hartlepool Hospital (to which the Council subscribes) or to the Howbeck Infirmary.

4. FEVER—

The Hartlepool Corporation is one of the constituent members of the Hartlepool Port Sanitary Authority which provides an Infectious Diseases Hospital on the Sea Banks to the North, but within the boundary of the Borough. This has to be rebuilt as it is inadequate.

5. SMALL-POX—

The Port Sanitary has a temporary arrangement with the Stockton Corporation and with the Middlesbrough Corporation whereby small-pox cases will be admitted into the Hospitals of these authorities.

UNMARRIED MOTHERS, ILLEGITIMATE AND HOMELESS CHILDREN.

Such women and children are admitted into Howbeck (Poor Law) Infirmary and maintained there by the Guardians. Cases of congenital venereal disease are also admitted.

AMBULANCE FACILITIES.

A van is kept at the Port Sanitary Hospital for the removal of infectious persons. A horse and driver are obtained from a local cab establishment when a case is to be removed.

For accidents, etc., a two-wheeled litter is maintained at the Police Station, and motor ambulances may be obtained for hire from either of two motor hiring firms—for non-infectious cases.

PUBLIC HEALTH OFFICERS OF THE LOCAL AUTHORITY.

<i>Medical Officer of Health and</i>			
<i>School Medical Officer</i>		WILLIAM MCKENDRICK, M.D., D.P.H.	
<i>Sanitary Inspector, etc.</i>	...	...	JOSEPH CHARLTON, A.R.S.I.
<i>Borough Analyst</i>	...	...	C. J. H. STOCK, F.I.C., F.C.S.
<i>Veterinary Surgeon</i>	...	...	B. HOADLEY, M.R.C.V.S.
<i>Health Visitors and School Nurses</i>	...	...	ALICE HAYDEN, M.R.C.I., MARY FELLOWES, M.R.C.I., JEAN FORBES, C.M.B.

PROFESSIONAL NURSING IN THE HOME.

The local Nursing Association provides nursing facilities in the home for the poorer classes. The Council make a grant towards this Association, in return for which the District Nurse is expected to attend on all cases of measles occurring in the district. The District Nurse has voluntarily attended at the Maternity and Child Welfare Centre to assist and to find if she can help in her daily round by visiting and treating sick children. She has been of great service to the Health Staff.

There are no private nursing homes in Hartlepool; persons wishing such must go to West Hartlepool or Newcastle.

MIDWIVES.

The County Council is responsible for the supervision of midwives, but there are now only two in practice in Hartlepool. The Corporation do not subsidize any practising midwife in any way.

LABORATORY WORK.

Bacteriological examinations are done by arrangement with the Durham County Council, at the Armstrong College of Medicine, Newcastle, the following being the tests made and results recorded during 1925 :—

	Positive	Negative	Total
Diphtheria Swabs ...	0	4	4
Blood for Widal test ...	0	1	1
Sputum for T.B. ...	2	8	10

The Council have instructed the Medical Officer of Health to keep ready for immediate use a stock of Diphtheria Antitoxin. This is kept partly in the Health Office and partly in the Police Station, where it may be obtained by Medical Practitioners free of charge at any time. During the past year a number of calls have been made on this supply.

List of Adoptive Acts, Bye-Laws and Local Regulations relating to the Health Department, in force in the Borough.

LOCAL ACTS. BOROUGH EXTENSION ACTS, 1883—1897.

HARTLEPOOL CORPORATION ACT, 1925.

ADOPTIVE ACTS. BATHS & WASH-HOUSES ACTS, 1846-97.

PUBLIC HEALTH (AMENDMENT) ACT, 1897
Parts I. II. & III.

HEALTH RESORTS & WATERING PLACES ACT,
1921.

PUBLIC HEALTH (AMENDMENTS) ACT, 1907—

Part I.

Part II. (Streets and Buildings)

Part III. (Sanitary Provisions)

Part IV. (Infectious Diseases)

Sec. 52—60 : 62—66 & 68.

Part V. (Common Lodging Houses)

Part VI. (Police)

Part VII. Sec. 79 & 99

Part VIII. (Fire Brigade)

Part IX.

Part X. (Miscellaneous)

During the year the following were added to the list :—

INFECTIOUS DISEASES PREVENTION ACT, 1890.
PUBLIC HEALTH ACT, 1925
Parts II., III., IV., V.

BYE-LAWS in force in the Borough :—

(i)	As to nuisances from snow, filth, etc.	...	5th Sept., 1892
(ii)	As to Common Lodging Houses	...	5th Sept., 1892
(iii)	As to the Management of Mortuary	...	5th May, 1910
(iv)	As to Slaughterhouses	...	5th Aug., 1910
(v)	As to New Streets and Buildings	...	6th Jan., 1893
(vi)	As to Clearance of Footpaths, etc.	...	5th Sept., 1892
	Regulations in respect of Diaries, Cowsheds and Milkshops	...	4th July, 1909

SANITARY CIRCUMSTANCES OF THE AREA.

WATER.

The Borough is supplied with water by a Company. The water comes from deep wells and is abundant and of great bacterial purity but of considerable hardness. The supply is constant, and as the water mains have, during the year, been duplicated there is now little chance of the water supply being cut off.

All the inhabitants of the town receive their water from this source, and very few have not water led directly into their houses. During 1925 no complaints were received regarding the water, but in previous years there were some complaints which were investigated and found to come from houses at the end of a "cul-de-sac" where the water was for considerable periods stagnant. The Water Company have remedied this trouble in some cases by extensive flushing of the "dead end." In another case the pipe was found to have an internal coating of fungi about .25 inch thick. The pipe was replaced by a new one.

There is little or no plumbo-solvent action of the water.

RIVERS AND STREAMS.

There is no contamination of watercourses in the Borough.

DRAINAGE AND SEWERAGE.

The drainage system of the town is now old and antiquated. The sewers are very large and take surface water as well as soil water. At the time of their construction it was arranged that they should periodically receive a thorough flushing from the head of water

retained in the dock by the dock gates, but with the conversion of the dock into an open harbour this flushing arrangement was lost and the large, almost flat sewers have become a serious handicap to the efficient drainage of the town. As the town has spread on to the reclaimed land of the Central Estate, a long flat extension to the sewerage system has developed to complicate matters. In some parts—even the most inland parts of the town—the sewers are tidal and this tends to cause silting. Great attention has therefore been required, and this has been given by the Borough Surveyor, who by means of flushing carts and rods has, during the past few years, prevented any serious nuisance. He is also alive to the defects and is steadily remedying them, so that in time the system will once more become a credit to the town.

The sewage is discharged in the crude state into the sea by a number of outfall sewers placed at intervals along the sea front. These outfall sewers have in some cases been too short—ending far above low water mark. This has been a fertile cause of complaint and has at last been remedied.

CLOSET ACCOMMODATION.

During the quinquennium the last of the privy middens and dry closets have been replaced by water closets in the area. While this was achieved only by agreeing to the placing of the water closets in odd corners, etc., it is a distinct triumph and is not without its effect on the health of the inhabitants.

SCAVENGING.

The scavenging of the town is under the control of the Borough Surveyor. It is as regards collection, very satisfactory. Ashpits have almost all been replaced by movable receptacles, and with the coming into force of the Hartlepool Corporation Act, 1925, Sec., 49., the Council can now require that covered galvanised iron dust-bins be provided by the owner or occupier. It is hoped that the Council will rapidly insist on this clause be observed as the old boxes, etc., used in the past have been as fertile sources of nuisance as the old fashioned ashpit.

The house refuse is frequently conveyed to the Destructor which is of modern installation and is efficient.

SMOKE ABATEMENT.

There has only been one serious source of complaint with regard to the emission of black smoke and it has frequently been very serious. Protests have been made and changes promised. I under-

stand that in this establishment new plant which will not cause nuisance is being installed. In view of this promised change the Council in meantime holding its hand.

SANITARY CIRCUMSTANCES, ETC.

The following are extracts from the annual report of the Sanitary Inspector, Mr. Joseph Charlton.

INSPECTIONS AND VISITS—

Houses <i>re</i> Nuisances	...	..	242	
Re-inspections	...	...	243	
				485
Fish Quay	...	...	...	162
Factories and Workshops, including Fish-curing Houses	...	...	...	406
Slaughter-houses and Butchers' Premises	...	...	...	607
Common Lodging Houses	...	...	...	98
Fried Fish Shops	...	...	...	74
Milk Shops	...	...	...	76
Cases of Infectious Diseases	...	...	...	120
Small-pox Contacts	...	...	...	316
Other Inspections	...	...	...	25
				2369

SUMMARY OF WORK DONE			Nuisances abated after		TOTAL
			Informal Notice	Formal Notice	
Nuisances from defective W.C.'s	...	52	11	63	
„ „ drains, traps and sinks	...	27	5	32	
„ „ yard pavements, &c.	...	10	4	14	
„ „ roofs and gutters	...	57	5	62	
„ „ foul conditions ...	...	23	—	23
„ „ deposits of refuse	...	10	—	10	
„ „ defective water supply	...	19	—	19	
„ „ „ „ fittings	...	23	1	24	
„ „ structural defects	...	80	4	84	
„ at common lodging houses	...	11	—	11	
„ „ factories and workshops	...	32	—	32	
„ „ slaughter houses...	...	33	1	34	
Other nuisances	... ..	15	—	15

Samples of Water taken from Town supply	...	...	1
Samples taken under Food and Drugs Acts	...	...	87
Premises Disinfected	...	...	55
Books Disinfected...	...	...	22
Inspections and Visits made	...	...	2369

The following have during 1925 been declared offensive trades :—

- (i) Extraction of Oil from Fish Livers.
- (ii) The Manufacture of Fish Meal.

Bye-laws or Regulations are needed for Fish Curing Houses, Fried Fish Shops and Ice-cream premises.

Cold storage premises have been opened where 200 tons of Meat can be stored under the best and most modern conditions.

Connected with these premises there is an Ice Factory where 60 tons of Ice per day can be manufactured and 200 tons of Ice can be stored.

The manufacture of fish oil was commenced, but owing to the nature of the business and the crude methods employed, the nuisance at times was intolerable. The works were closed down and finally dismantled.

A Factory for making fish meal from fish refuse has been started. The refuse is cooked in steam jacketed concentrators fitted with revolving blades.

The result being a powder without any offensive odour, which is of great value as a food for poultry, etc.

The moist offensive vapour is condensed, the water passing into the sewer cool and without smell.

Foul air is conveyed to the furnace and there cremated.

The initial stages were marked by complaints, but the difficulties have been overcome and complaints are now rare. Practically everything depends upon careful management.

An important factor is, that it can deal with all white fish refuse on the fish quay, and that from all fish shops. 30 Tons a day could be dealt with.

All fish liver is sent to Grimsby in properly headed casks, where it is converted into oil.

Herring refuse is not dealt with at the fish meal factory ; with the necessary plant it can be made into a valuable fertiliser.

At present as much as possible is sent on to the land, the remainder has to be taken to sea and dumped.

INFECTIOUS DISEASES.

VISITS		Premises Disinfected	Removed to Hospital	Books Disinfected or Destroyed
Scarlet Fever	... 67	48	30	22
Diphtheria	... 4	3	1	
Small-pox	... 4	2	2	
Tuberculosis	... 45	2		
120		55	33	22

There were 316 Small-pox contacts from 124 homes. All these were visited at least twice. Most of them were visited three times by the M.O.H. or myself.

The issue of books from the Public Library to premises where there is tuberculosis is prohibited.

COMMON LODGING HOUSES.

There are Five registered houses, the licenses being renewable every 12 months.

They have been visited from time to time and found to be in good order.

FACTORY AND WORKSHOPS ACTS.

No. of Workshops and Workplaces on the Register, 28.

				Inspec- tions	Defects found	Defects Rem- edied	Notices from H.M. Inspector
Factories	...	...	...	105	10	10	
Workshops and Workplaces including Fish Curing premises				281	22	22	2
				386	32	32	2

SCHOOLS.

The Schools of the town are mostly old and some are not desirable. Before the war plans were prepared for the erection of a large school. Naturally this fell through, but progress is now being made and it is hoped during 1926 to erect a large modern building which will replace one and perhaps more of the less hygienic school buildings. It is hoped that some open-air classes will be provided in connection with this school—they would be a great benefit to the more delicate children.

Thorough inspection of schools has been carried out but no closures have been deemed necessary during 1925.

HOUSING.

The housing problem is very acute in Hartlepool, and overcrowding is very common. Many houses contain several families.

The 1921 census showed that there were 3879 inhabited houses, and 4498 separate occupiers in that year. In other words 619 families were without homes, and one sixth of the houses contained more than one tenant.

During the four years that have elapsed since the census the population has increased by 943. Closing orders have been made for 28 houses and 164 houses have been provided. Thus there has been a net gain of 136 houses as against a net gain of 943 inhabitants, or one house for every seven new inhabitants.

The following statement shows the progress made in "housing" during the past five years:—

No. of houses required under the Housing Survey, 1919...	508
Houses built by Council up to 1923	127
Flats built in Durham Street in 1923	3
Houses built in 1924	8
Coal Exchange converted into flats in 1924	7
Houses built in 1925—	
Union Road	6
Howard Street	6
Earl Street	7
	<hr/>
	19
	<hr/>
	164

Houses in course of erection—

Leah Terrace and Union Road	2	
Scheme E	4	
Scheme F	4	
		10

174

Houses still required under Housing Survey, 1919	334
--	-----

Two houses are being built on the Fisher Road Site by private enterprise.

Houses that must be built under the Silver Street

and Croft Terrace Scheme	104
---------------------------------	-----

Houses already provided under that scheme	29
--	----

75

Thus 75 houses must still be erected before it will be possible to tackle any other scheme. Going at the present rate of 19 new houses per annum, it will be 1930 before further progress is possible. 26 tenements (Oddy's Buildings in Frederick Street) were reported for consideration, but it is meantime impracticable to proceed with these. During 1925, housing surveys were limited to the discovery of defects and to having these remedied.

One would point out that all the building being done in the Borough, aims at the demolition of slum property by finding houses for the present occupants of such. In other words, no attempt is being made to reduce overcrowding in the town at large. That such overcrowding exists is well known. This procedure is irrational because overcrowding causes the rapid deterioration of good property and as a result, while the Council is remedying one slum, two or three other slums are being created. If the present policy of rehousing the tenants of Silver Street Area is persisted in, one cannot see an end to the erection of Council Houses. The Council ought to devote its entire energy to the prevention rather than the cure of slums. This would require the following changes :—

- (i) A very much greater production of houses.

During the past three years the rate has been :—

1923	3
1924	8
1925	19

It should be possible very much to augment this.

- (ii) Once a house has been cleared of surplus tenants, a careful watch should be kept and a vigorous prosecution instituted on the first effort of the landlord or tenant being made to allow overcrowding.
- (iii) Meantime the slum areas should be left alone. They cannot deteriorate and when their increase is prevented, their ultimate extermination becomes possible.

It is obvious that the "bait" offered to private speculative builders is not big enough.

At the present time no legal effort is practicable that aims at the reduction of overcrowding. Overcrowding cannot be remedied without more houses being provided. I have previously suggested the erection of wooden huts which could be completed in a few days. Such places would be infinitely healthier than hundreds of the homes in the Borough to day, and one questions whether the life of some of the new houses will last as long as a wooden hut.

As will be seen from the table prepared by the Sanitary Inspector, most of his work deal with housing defects—defective roofs and gutters, defective W.C.'s, etc., defective pavements and yards and structural defects—damp walls due to the cement coating on the outerwall being cracked, etc., perished woodwork. These are the commonest defects. In all 30 formal notices were served.

In many cases these defects are due to age, but in all to many cases the fault is one of neglect. Frequently the neglect is on the part of the owner—especially those owners who have difficulties in collecting rents. In other cases, the fault is the tenant's. Some tenants will not make any effort to prevent a defect from developing—they may even encourage it to grow.

During the year 485 houses were inspected and 392 were rendered fit as a result of informal action. The latter number is much higher than in recent years—it was only surpassed once in the quinquennium, i.e.—in 1921 when there 9 more.

HOUSING STATISTICS.

Number of new houses erected during the year :—

(a)	Total	...	...	...	...	19
(b)	By State assistance under the Housing Acts, 1919, 1923 or 1924 :					
(i)	By Local Authority	...	...	...	...	19
(ii)	By other bodies or persons	...	...	...	...	0

1. *Unfit Dwellings.*

Inspections :

(i)	Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts	485
(ii)	Number of houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910 ...	?
(iii)	Number of houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ...	0
(iiii)	Number of dwelling-houses (exclusive of those under the preceeding sub-heading) found not to be in all respects reasonably fit for human habitation	422

2. *Defects remedied without service of formal Notices :*

Number of defective dwelling-houses rendered fit in consequence of informal action by the L.A. or their officers	392
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3. *Action under Statutory Powers :*

A.—Proceedings under Section 3 of Housing Act, 1925.

(i)	Number of dwelling-houses in respect of which notices were served requiring repairs	
(ii)	Number of dwelling-houses which were rendered fit after service of formal notice	
(a)	by Owners	0
(b)	by L.A. in default of the Owners ...	0
(c)	Number of houses in respect of which Closing Orders became operative in pursuance of declaration by owners of intention to close	0

B.—Proceedings under Public Health Acts.

(i)	Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	30
(ii)	Number of dwelling-houses in which defects were remedied after formal notices :	
(a)	by Owners.	30
(b)	by L.A. in default of owners ...	0

C.—Proceedings under Sections 11, 14 and 15 of Housing Act, 1925.

(i) Number of representations made with a view to the making of Closing Orders ...	0
(ii) Number of dwelling-houses in respect of which Closing Orders were made ...	0
(iii) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling-houses having been rendered fit	0
(iv) Number of dwelling-houses in respect of which Demolition Orders were made ...	0
(v) Number of dwelling-houses demolished in pursuance of Demolition Orders ...	0

INSPECTION AND SUPERVISION OF FOOD.

FOOD AND DRUGS ACTS—

Samples Taken	Formal	Informal	Total	
Milk	32	—	32	9 below standard
Fresh Cream		1	1	
Preserved Cream ..		3	3	
Condensed Milk—				
Full Cream, Sweetened ...	1	4	5	
„ Unsweetened		1	1	
„ Evaporated		1	1	
Butter	1	4	5	1 contained Boric Acid
Margarine	2	2	4	All contained Boric Acid
Lard		3	3	
Baking Powder		5	5	
Egg Substitute		1	1	
Custard Powder		2	2	
Cocoa		1	1	
Preserved Peas		1	1	Contained Copper
Jam		11	11	See note below
Meat and Fish Paste ...		5	5	
Mineral Waters		6	6	
TOTALS	36	41	87	

Seven of the Milk samples reported below were deficient in non-fatty solids, the figures ranging from :—

8.00% to 8.42% Non-fatty solids	—	Standard 8.50%
3.00% to 5.30% Fat	—	„ 3.00%

None were below the standard for “fat,” the lowest in N.F.S. was the highest in fat.

Two of them were taken on delivery at the Railway Station.

One marked Morning Milk contained 8.25% N.F.S. and 3.05% Fat.

One marked Evening Milk contained 8.42% N.F.S. and 3.60% Fat.

It was not considered advisable to take proceedings in any case.

The other Two samples were deficient in fat.

One to the extent of 17.67%.	Fined £5.
„ „ 9.67%.	„ £2.

PUBLIC HEALTH (Milk and Cream) REGULATIONS.

All samples of Milk were free from preservatives and dirt. One sample of Cream, not sold as preserved cream, contained 57.40% of fat, and was free from preservatives. Three samples of Preserved Cream were taken, they were correctly labelled.

One contained 52.50% of Fat	—	.2% Boric Acid
„ „ 64.37% „	—	.33% „ „
„ „ 61.31% „	—	.09% „ „

THE MILK (Special Designation) ORDER, 1923.

No licenses were issued under this order.

All the Condensed Milks were genuine.

The names of nine retailers of Milk were removed from the register, their premises not being suitable.

One business was given up.

One person was fined 40/- for selling Milk without being registered.

No. of registered retail milk dealers	...	...	9
No. of registered wholesale and retail dealers	...	...	7
			<hr/>
			16
Applications to sell Milk retail, not granted...	...	...	2
Applications to sell Milk retail, granted	...	...	1

The standard of the milk shops has been improved by the enforcement of the conditions laid down by the Council in 1925 :—

- (i) No persons should be allowed to sell Milk (other than bottled milk) from premises from which the following are sold :—

- a. Odorous or dusty articles.
- b. Fish, including shell-fish and kippers.
- c. Yeast.
- d. Vinegar, unless bottled.
- e. Uncooked meats, rabbits, ham, etc.
- f. Clothing.
- g. Vegetables, cabbages, cauliflowers; greens, potatoes, turnips, etc.

- (ii) Premises must be scrubbed out each day.

- (iii) Sawdust must not be allowed to lie on the floor.

For future applications two further conditions were recommended :—

- (i) The shop must not communicate directly with a living room.
- (ii) The shop should be a lock-up shop.

These conditions were agreed, and milk dealers were warned that a survey would be made in January, 1925.

One sample of Butter contained Boric Acid to the extent of 2.30 in grains per lb.

The boric acid in the Margarine samples ranged from 4.00 to 12.30 grains per lb.

The sample of Preserved Peas contained copper equivalent to 1.5 grains per lb. of copper sulphate crystallised.

This amount was considered within limits.

When the Public Health (Preservatives, &c., in Food) Regulations 1925, come into force, the introduction of compounds of copper will become illegal.

The samples of Jam, &c., were taken in connection with the Government enquiry, *re* glass particles in food packed in glass containers.

11 Samples of Jam, five of Meat and Fish Paste, and six of Mineral Waters were taken.

These samples were also examined for preservatives.

Seven samples of Jam contained fragments of glass.

In one a trace of Salicylic Acid was found.

Four samples of Meat and Fish Paste contained fragments of glass and glass splinters. One had a trace of Boric Acid. The size of the glass particles in the jam and paste ranged from $1/50 \times 1/60$ to $1/200 \times 1/400$ of an inch.

Five of the samples of Mineral Water contained particles of glass ranging from $1/57 \times 1/100$ to $1/500 \times 1/1000$ of an inch.

One contained a trace of copper.

FOOD SUPPLY.

The Fish Quay has been kept in good order, and the fish landed has been of good quality.

The Public Health (Meat) Regulations 1924, came into operation on the 1st April, 1925. Copies of the regulations were given to all concerned, and regular visits have been made to all shops, stalls, stores, etc. There is a general desire on the part of butchers to comply with the spirit of the regulations although much progress still has to be made.

We have seven registered and four licensed slaughter-houses.

In 1915, there were nine registered and 10 licensed slaughter houses. In 1910, there were 13 registered and 11 licensed slaughter houses.

PRIVATE SLAUGHTER HOUSES.

		In 1920		In Jan., 1925.		In Dec., 1925.
Registered	...	7	...	7	...	7
Licensed	...	8	...	4	...	4
		<hr/>		<hr/>		<hr/>
Total		15		11		11
		<hr/>		<hr/>		<hr/>

The following carcasses were examined :—

Cattle, 377 ; Calves, 19 ; Pigs, 118 ; Sheep, 118. Total 632.

The carcasses of three cattle were slightly affected with tuberculosis ; the diseased parts were destroyed and the rest of the meat passed. Meat showing signs of disease is examined by the M.O.H. and his instructions carried out.

A very large and increasing quantity of imported meat is sold in the Borough.

Food destroyed consisted of 112 lbs. of beef, four sets of lungs 13 boxes of smoked fish and eight rabbits.

Contagious Diseases (Animals) Acts. There has been no outbreak of disease in the Borough.

The numerous Orders and Circulars, &c., from the Ministry of Agriculture have been attended to and when necessary published. 96 Licenses for the movement of swine were received.

On September 24th, a Spanish ship arrived at the Port with a pig on board, which is contrary to the regulations. The usual notice, with a copy of the Order of 1922, was served on the Master.

The vessel sailed for Genoa on September 29th.

Frequent inspections have been made to all bakehouses and other places where food is prepared and exposed for sale. These places are steadily improving under the constant pressure, and it has been unnecessary to take legal action. The coming into force of certain sections of the Hartlepool Corporation Act, 1925, and the Public Health Act, 1925, will still further strengthen this pressure.

A case of food poisoning was reported in the Borough in 1924. The Health Department were however never satisfied with the diagnosis, although it was reported to the Ministry of Health. Recently the case was thrashed out in court during a civil action for damages. As a result of the evidence led the action was dismissed.

There is however a constant danger of poisoning from the eating of shellfish picked up on the beach—especially those got near the sewer outfalls. There can be no denying the fact that small crabs, etc., from such polluted sources are eaten in the Borough, and during the past few years cases have frequently come to my notice of a scarletiform and morbilliform rash accompanied by gastritis, which I attribute, with apparant justification, to this cause.

PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASE.

A detailed statement of the incidence of infectious disease will be found earlier in this report under the heading "Causes of sickness and invalidity."

Diphtheria antitoxin may be received on demand by a medical practitioner at the Health Department or Police Station. Schick & Dick tests have not so far been used to control diphtheria and scarlet fever respectively. The Hospital is under the care of the Port Medical Officer, and all cases are very satisfactorily treated—in spite of understaffing of the hospital. Very few return cases have been found, and my experience is that the present arrangement for treatment is quite satisfactory. I trust, however, that the Port Sanitary Authority will hasten the erection of a new hospital, as that would remove every honest criticism.

With small-pox in epidemic state in Durham County, the Borough may feel themselves very thankful for their continued good fortune in that only one case has so far occurred in the town. There is only one method of preventing the disease and that is by efficient vaccination. I am indebted to Mr. Nicholson, the Vaccination Officer, for the following statement:—

Total number of Births Registered in 1925	...	564
Number vaccinated	... ..	407
Number exempted	... ..	111
Number removed from district	... ..	2
Number postponed	... ..	14
Number dead before being vaccinated	...	30
		<hr/> 564

Thus it will be seen that even in those tragic times of epidemic there are 111 parents whose consciences are so sensitive that they can allow their children to live under the threat of small-pox unprotected when protection can so easily and safely be obtained. Not only are they gambling in the lives of their children, they are wilfully exposing the community to needless danger and cost. Consciences should only be allowed to sane, public spirited parents. If such were the case, the conscientious objectors would be very small in number indeed.

At the time of the occurrence of the small-pox case in Hartlepool the M.O.H. offered free vaccination or re-vaccination to all contacts. The report made to the Health Committee on the preventative measures then adopted will be found in the appendix.

Reports are from time to time received from head teachers as to the incidence of non-notifiable infectious disease, and while these are useful and have from time to time been the means of special action being taken by the Health Department, no accurate figures are possible and no record was kept till 1924, since when the following intimations were received:

	1924		1925
Measles	107	...	37
Whooping Cough...	8	...	8
Chicken-pox	54	...	27
Mumps	0	...	1
	<hr/> 169	...	<hr/> 76

It was felt that these were wholly inadequate, and in the Hartlepool Corporation Act, 1925, Sec. 30, it was made compulsory for parents to notify head teachers of the occurrence of any case of measles, German measles, whooping cough, chicken-pox or influenza. These will be passed on to the Health Department.

The new Act also gives power for the Council compulsorily to cleanse verminous persons. It is intended to utilise the bath and sprays in the new clinic for this purpose.

TUBERCULOSIS.

This has been dealt with earlier in the report.

No action has so far been taken for the compulsory removal of tubercular persons to hospital or under the Public Health (Prevention of Tuberculosis) Regulations, 1925.

MATERNITY AND CHILD WELFARE.

The following tables show the work done amongst Infants and Children since 1922.

NOTIFICATION OF BIRTHS ACT.

	1922	1923	1924	1925
<i>a.</i> LIVE BIRTHS—				
Notified by Doctors ...	533	439	529	483
Notified by Midwives ...	80	51	78	84
Not notified ...	1	14	15	14
Total ...	614	504	622	581
<i>b.</i> STILL BIRTHS ...	21	6	19	10

MATERNITY AND CHILD WELFARE CENTRES.

	1922	1923	1924	1925
<i>1.</i> INFANTS—				
New cases enrolled ...	229	150	201	238
Cases re-enrolled ...	43	41	39	39
Total enrolments ...	272	191	238	277
Centre openings ...	49	49	49	50
Average attendance ...	23	17	22	33
Total Attendances ...	1153	851	1114	1650
Infants who came more than twice ...	137	141	153	225
Infants referred to Hospital... ..	12	10	11	6
Infants referred to School Clinic	0	0	10	5
Total attendances at do ...	0	0	44	8

2. CHILDREN—1 to 5 Years—

New cases enrolled	...	81	55	117	158
Cases re-enrolled	...	7	15	11	61
Total enrolments	...	88	70	128	219
Average attendance	...	5	5	7	13
Total attendances	...	188	204	336	638
Number who attended more than twice	...	21	29	53	127
Number referred to Hospital		0	8	4	3
Number referred to School Clinic		0	0	42	56
Total attendances at do.		0	0	116	159

DISTRIBUTION OF DRIED MILK.

		1923	1924	1925
1. Sold at reduced price	...	2626	2629	1805
2. Distributed free	...	708	980	868
3. Supplied at cost of Guardians	...	0	172	66
Total	...	3334	3781	2739

VISITS BY HEALTH VISITORS.

		1922	1923	1924	1925
1. Births—					
First Visits	...	676	593	618	693
Re-visits	...	910	973	1774	1675
2. Children 1 to 5 years	...	64	128	126	67
3. Expectant Mothers	...	61	59	42	93
4. Tuberculosis Visits—					
First Visits	...	—	53	62	40
Re-visits	...	—	830	762	454
5. Attendances at Centre	...	49	49	49	50
6. Attendances at Tuberculosis Dispensary	...	48	47	48	45
7. Sanitary Defects reported	...	—	40	46	52

From the above figures it will readily be seen that there has been a progressive increase in the work done for children, infants and expectant mothers. The fact that visits to homes are not increased, depends on the fact that for over two months we had only one health visitor, and the effect of the appointment of an additional health visitor was not felt till very late in the year owing to illness.

No statement of attendances of expectant mothers is given because they did not begin to attend till October, and then gradually increased in numbers so that during the two last months of the year

an average of four per week attended, while prior to that the numbers were negligible. In a similar manner the visits to expectant mothers are largely grouped in the last few months. This branch of the work has naturally increased with the appointment of Nurse Forbes whose interests are largely with the expectant mothers. This section should grow very considerably.

It is unfortunate that no contact should take place between the practising midwives of the district and the Health Department. Inspection of Midwives is done by the County Council, but it would be a great advantage to all concerned if midwives would attend at the ante-natal clinic with expectant mothers and also come with them to the Child Welfare Centre. The fault is largely that of the midwives, who seem to resent the Health Visitor calling on their patients after a fortnight—in some cases the midwife has had reason to fear the visit of the Health Visitor.

There has been a remarkable absence of Puerperal Fever in the district during the past few years. During the past five years only one case of puerperal sepsis was notified, while three deaths occurred.

This is very good considering that for the three deaths, there were 3073 births. For the five years there were 13 deaths associated with child-birth. In all, there were 16 deaths which gives a rate of 5.2 per 1000 births. It is disquieting however, to note that the deaths from puerperal fever have all occurred during the past 16 months and that the deaths from other conditions connected with child-birth are not falling.

Enquiry has been made into the causes of maternal deaths and the causes of infant deaths. The latter are set out under the heading Infant Mortality.

The problem of the illegitimate child is acute. When one notes that the infant mortality rate amongst these children was 400 per 1000 during the year, it will readily be understood that the task of caring for these is as yet inadequately done. Careful supervision is given, but the nurses feel that under prevailing conditions an unwanted child has little chance of surviving. The Guardians do something to help such and the Council allow a generous supply of free glaxo, while the nurses visit very frequently, but the burden of such a child on an unemployed mother remains very great.

The considerable increase in the attendances of infants is very encouraging. One would point out that contrary to the custom in most towns tea is not provided at the Centre. Further, the fact that

the distribution of free glaxo has been considerably reduced so that the charge frequently made that mothers attend for what they can get, does not apply. The attendance is obviously due to an honest desire for information.

With the establishment of a thoroughly up-to-date and efficient Orthopædic Centre at the Hartlepool Hospital, much more is now being done for cripple children. It is unfortunate that the scheme submitted by me to the Council and thence to the Ministry of Health, has not yet come into force. When it does, much greater use of the hospital by cripple children in the town will be accomplished.

So far no official scheme for the dental treatment of infants or mothers has been drawn up, but Mr. Manners, the School Dentist, has very kindly and voluntarily treated such children as I felt required treatment. There have necessarily been fewer than one would have liked. The Council must consider the question of providing dental treatment, even an occasional session would be an advantage. The question of treatment of expectant mothers is a big one, although very necessary, and sooner or later will become compulsory on all authorities.

In a large number of cases, one has had to advise women to have their teeth seen to, prior to the birth of their children, but the advice is a counsel of perfection, and even in giving it, one has felt its absurdity. A session a week would probably be sufficient for the first year and would be very beneficial.

The incidence of common diseases of childhood on the life of the town has already been discussed.

Special Reports presented by the Medical Officer during 1925 to the Council.

(A) On the occurrence of smallpox in the town.

The first case of smallpox was notified at 4-30 p.m., on 30th April, and was seen by the M.O.H., Hartlepool with the M.O.H., West Hartlepool in consultation at 5 p.m. on the same day. It was removed to Hemlington Hospital, Middlesbrough 3 hours later. There was a doubt about the diagnosis, but it was accepted by the Hospital Authorities and retained till a successful vaccination excluded the possibility of smallpox. The diagnosis was altered and the notification withdrawn on 13th May, when the child was dismissed from Hospital.

The second case was notified on 4th May, at 11 a.m. It was seen by the M.O.H. at 11-15 a.m., and removed to Hemlington Hospital at 3 p.m.

The first case was a child under school age (unvaccinated) while the second was a woman of middle-age (vaccinated in infancy).

In connection with the first case there were 119 contacts from 57 homes, plus the children who had attended St. Mary's Sunday School on the previous Sunday. There were 197 contacts from 67 homes in connection with the second case. All contacts were visited at least twice—most were visited three times. Two instances of people trying to hide the fact that they had been contacts were found. Most of the contacts visited were vaccinated when requested, and were vaccinated by Medical Officer of Health.

Complete lists of unvaccinated children in schools were obtained and showed that 645 children of school age existed in the town. These lists were given to the Public Vaccinator and arrangements made—with the consent of the Education Committee—for him to visit all schools for the purpose of vaccinating or re-vaccinating all children whose parents agreed to the procedure. As a result the list was reduced by about 250, leaving 400 children unprotected. It is noteworthy that more than half these unprotected children attend Hart Road School.

ON THE DISPOSAL OF FISH REFUSE.

The problem of how to dispose of fish refuse in Hartlepool has in the past caused much trouble and is still acute.

The following methods have been tried, but none have been quite successful :—

1. It has been sent to Farmers to be used as manure. There does not appear to be a demand for it by the farmers of the vicinity for the purpose. Moreover, when deposited in large quantities in fields, it rapidly gives rise to nuisance in the vicinity.
2. It has been sent to Fish Manure Factories in other towns.
This method is very successful in Winter, but unfortunately in Summer, during the fishing season, these factories have been able to secure more than sufficient fish refuse in their own neighbourhood and have consequently refused to take it from Hartlepool.

Consequently this method breaks down at the critical point.

3. It has been sent to sea on a hopper provided for the purpose by the L.N.E.R. Co.

Apart from the nuisance caused during the process of loading the hopper, this method was effectual. It is, however, a very wasteful method. This Summer the hopper is not available.

The fish curers are sending as much as they can (and more than they ought) to farmers. A representative of a Grimsby firm is sending as much white fish and herring offal as he can to a factory there.

Part of the white fish is going to the factory of The Hartlepool Fish Meal Company, but this firm cannot take herring offal as it is unsuitable for making the quality of fish meal they wish to produce. This being the case we must do what we can to minimise any nuisance that may arise. Fish refuse (whether white fish, herring offal or fish liver) is a valuable article of commerce. The white fish can be made into food for cattle, pigs, sheep, and poultry, and is also an admirable food for dogs. Other fish offal, including herring offal, can be made into fertilizers for land.

The oil can be extracted from fish livers and after being stored till bright and clear, it may be utilized for various processes such as leather dressing, soap making, steel hardening, etc.

Thus it will be seen that associated with a fishing port three different processes are requisite for the adequate and economical disposal of fish offal.

1. Process for converting fresh white fish offal into fish meal.
2. Process for converting other fish offal (including herring offal) into manure.
3. Process for extracting oil from fish livers.

I have made enquiries regarding such processes and visited some factories—including one where all three are simultaneously produced. The output varies in the different factories visited—one factory can deal with 160 tons of offal and 400 to 500 barrels of fish livers daily; while another deals with 12 tons daily.

A brief description of the process of dealing with offal will not be out of place :—

1. The barrels containing offal are hoisted to an upper floor or they may be emptied on the ground floor, and the offal raised by means of an elevator.
2. From this floor the offal is emptied into concentrators. The concentrator is a jacketed cylinder with an entrance above or on the side, an exit at the lowest point and a

fan exhaust at the highest point. In the cylinder are revolving blades which effectually churn and crush the offal.

Steam under pressure is led into the jacket of the condenser.

3. The process takes 6 to 8 hours to complete, when a slightly moist, steaming powder is removed and spread out to dry. The steam has a clinging but not unpleasant smell.
4. When dry, the powder is passed through screens, one of which is magnetised to catch fish hooks, etc.

The bones and coarse material is later ground up and added to the powder. The completed article is a fine and practically odourless powder.

During the cooking process a large quantity of hot, very offensive vapour is produced. This is usually drawn off by a fan or extractor and led to a condenser where a bountiful supply of water causes condensation of the vapour. The waste water is then led to the sewer as cold water. In certain types of condenser, arrangement is made for any air that makes its way into the condenser to be led to the furnace and there cremated. The processes where this procedure is employed seem very efficient.

An essential of the process is an abundant supply of water. This is in various places obtained from (a) the sea (b) bore holes (c) the public supply. The latter is unsatisfactory, as the quantity required is much greater than any public service can give. Various types of condenser are in use, but the principle is the same in all.

In the various works visited, everything from the receiving of the offal to the delivery of the finished product, was done under cover.

Offal for fertilizer is treated similarly to offal for fish meal described above.

Extraction of oil from fish livers is essentially the same process, except that the oil has to be siphoned off and the residue (foots) removed. The latter may be either added to the offal for making fertilizer or otherwise disposed of. Unless promptly and adequately treated will cause great nuisance, as was experienced in the Baltic Street and Clifton Street Factories, no longer in existence.

The chief causes of nuisance are :—

1. The breakdown of, or any defect in the condensing machinery.
2. The use of putrid offal, especially offensive during the process of filling the concentrators.
3. Storage of offal.
4. Lack of cleanliness in respect of the premises and refuse barrels.
5. Carelessness of workmen.

Owing to the nature and quantity of the material being dealt with, a certain amount of smell is inevitable and the atmosphere in the neighbourhood is bound to be effected, more or less, at times, but this can be greatly minimised by careful management.

My opinion is, that it may be possible to carry on a small meal fertilizer and oil factory, fitted with modern machinery, without creating a serious public nuisance, but large works should be at a considerable distance from any town.

WILLIAM McKENDRICK.

